

1. The specification stands objected to under 37 C.F.R. 1.71 because it fails to provide an enabling disclosure by adequately teaching how to make and/or use the invention. The Office Action continues that it is not clear as to how the cam, the bearing rings and the end pieces are able to be both slid onto the pipe and be fixed sufficiently for operation/usage.

Applicants submit that when the cam is slid onto the pipe, it becomes fixed at a certain desired location. Upon use there occurs a cold welding between the pipe and the cam and a very strong connection results between cam and pipe.

2. Applicants are now deleting the language found to be objectionable.

5. The changes made in the present amendment to the specification are deemed to obviate the rejection.

6. Claims 1 and 6 through 8 stand rejected under 35 USC 112, second paragraph as containing subject matter which was not described in the specification. Applicants are eliminating the objectional language from the claims.

8. Claims 1 through 5 and 8 as (best understood) stand rejected under 35 U.S.C. 103 (a) as being unpatentable over any one of Seim et al. ("The increase of safety ...

coatings"), Eigi (JP 08-093884), Swars (EP 320,789), or Swars (US 5,038,450) in view of Arnold et al. (US 5,201,246).

The rejection is respectfully traversed.

Seim et al. teach on page 285, point 2.4 a longitudinal press connection with profiled press surfaces. The reference teaches to employ a certain profile on the bore of the cam and to employ this to obtain a connection. This teaching of the reference is clearly and patentably distinguished in claim 1 of the instant application requiring "a pipe coated by a jointing coating on an outer cylindrical surface and an inner cylindrical surface" which is clearly outside the scope of Seim et al.

Eigi (JP 08-093884) teaches applying a phosphate coating on an outer peripheral surface of a shaft 2. In contrast, claim 1 of the present application requires: "wherein the jointing coating of the pipe and the jointing coating of the cams, the bearing rings and the end pieces create durable joints between the pipe and the cams, the bearing rings and the end pieces". No jointing coating of the cams is taught in the Eigi reference. Consequently it is urged that based on the "jointing coating of the cams, the bearing rings and the end pieces", claim 1 clearly and

patentably distinguishes over the Eigi reference.

The reference Swars (EP 320,789) teaches in column 5, lines 10 through 15 that "a material fitting connection between the material of the edge layer of the passage opening of the construction element is formed with the material of the plastically deformed hollow shaft by the hydraulically effected expansion of the hollow shaft". Applicants urge that claim 1 requires as set forth already above "wherein the jointing coating of the pipe and the jointing coating of the cams, the bearing rings and the end pieces create durable joints between the pipe and the cams, the bearing rings and the end pieces". No jointing coating of the pipe or of the cams is taught in the reference Swars (EP 320,789). Applicants respectfully submit that the reference Swars (EP 320,789) joins the references Seim et al. ("The increase of safety ... coatings"), and Eigi (JP 08-093884) in teaching away from the present invention.

The reference Swars (US 5,038,450) teaches in the Abstract, lines 1 through 6: "A process for producing an assembled crankshaft, transmission shaft or camshaft, in the case of which expansion of the inserted sleeves takes place for the purpose of producing a force-locking connection between slide-on drive elements or bearing sleeves and

tubular members. Thus the reference Swars (US 5,038,450) agrees with the reference Swars (EP 320,799) that a forced expansion of an inner sleeve is to be performed to obtain a camshaft. The reference Swars (US 5,038,450) further agrees with the references Seim et al. ("The increase of safety ... coatings"), Eigi (JP 08-093884), and Swars (EP 320,789) in not to provide "the jointing coating of the cams, the bearing rings and the end pieces" expressly required according to the language of claim 1.

Applicants urge that where four references agree in not providing an element of an applicant's invention, that then such element is clearly an unexpected element and clearly non-obvious over such a plurality of references.

The reference Arnold et al. (US 5,201,246) teaches in the Abstract, lines 4 through 9: "An economical and rapid method of assembly uses indexing balls pressed into accurately positioned blind holes in the tube and grooves in the bores or hubs of the cam elements to angularly locate the cams with precision prior to locking them tightly into place by expansion of the tube." Thus the reference Arnold et al. (US 5,201,246) agrees with the references Swars (EP 320,789) and Swars (US 5,038,450) to provide for a forced expansion of the inner tube in order to lock cams tightly in

place.

All five references Seim et al. ("The increase of safety ... coatings"), Eigi (JP 08-093884), Swars (EP 320,789), Swars (US 5,038,450) and Arnold et al. (US 5,201,246) agree not to furnish the "jointing coating of the cams, the bearing rings and the end pieces" expressly required to be present according to claim 1 of the present application. Applicants urge that an agreement of five references applied to not to provide an element clearly and expressly required according to the claims of the applicant raises immediately the question of positive patentability based on the presence of such an element in the construction of the applicants.

Applicants urge that where five references fail to teach an element expressly required in applicants' claims, even the famous person of ordinary skill in the art is at such point unable in helping to contradict a presence of an unobvious invention based on such unique element.

The lack of a rejection on the art of claims 5 and 6 is noted. After the present amendment to obviate rejections under 35 USC 112, it is deemed that these claims are in allowable form.

The present preliminary amendment is submitted in


order to provide improved claims.

Entry of the above recited changes is respectfully requested.

Respectfully submitted,

Herbert Gropp et al.

By:



Horst M. Kasper, their attorney
13 Forest Drive, Warren, N.J. 07059
Telephone: (908) 757-2839
Telefax: (908) 668-5262
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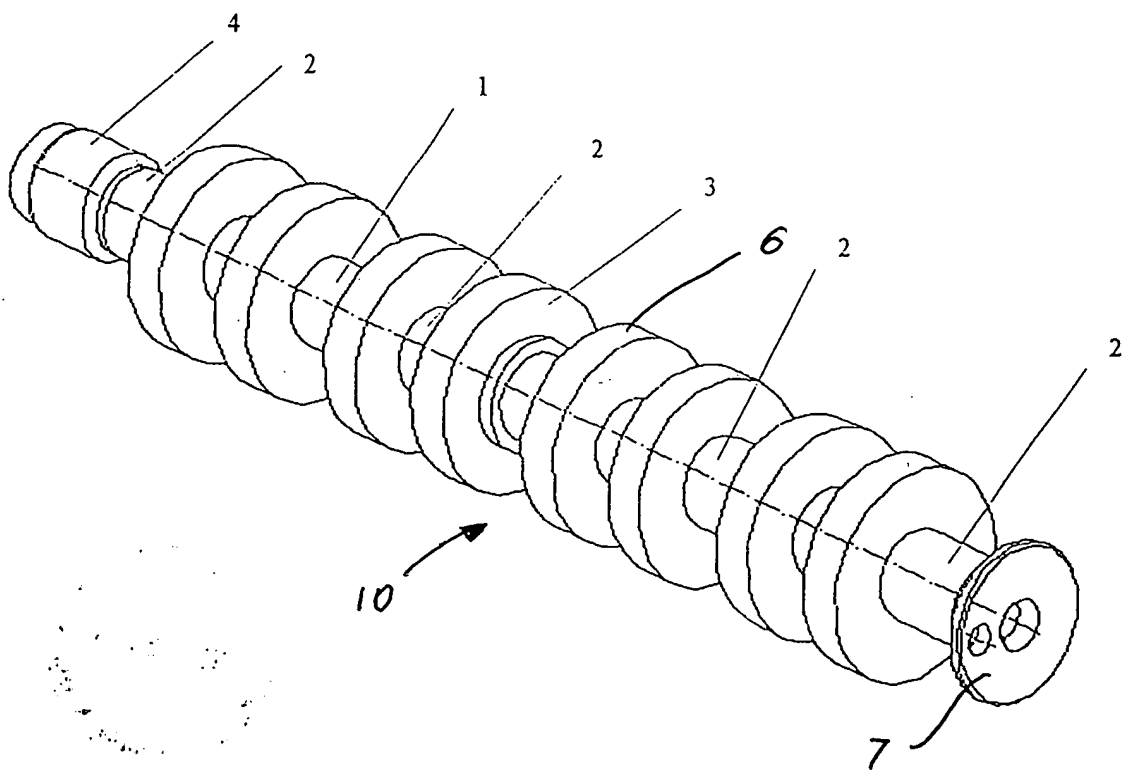
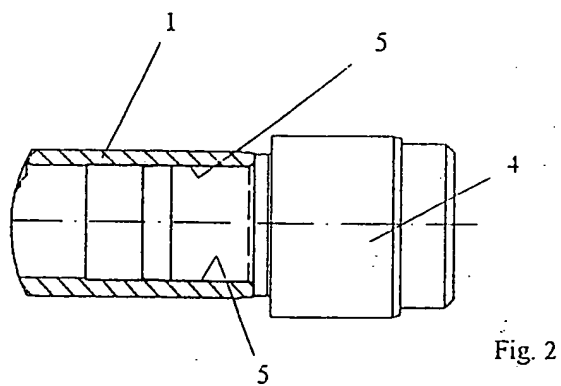
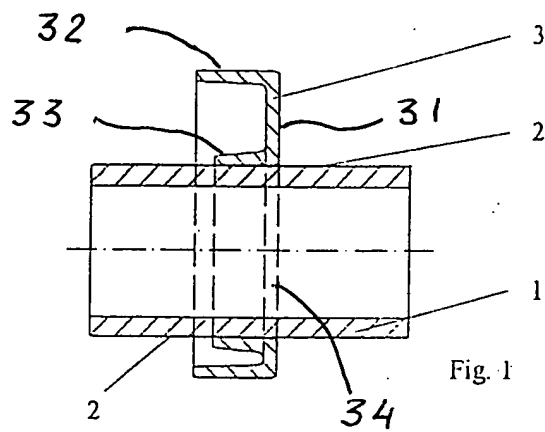


Fig.3

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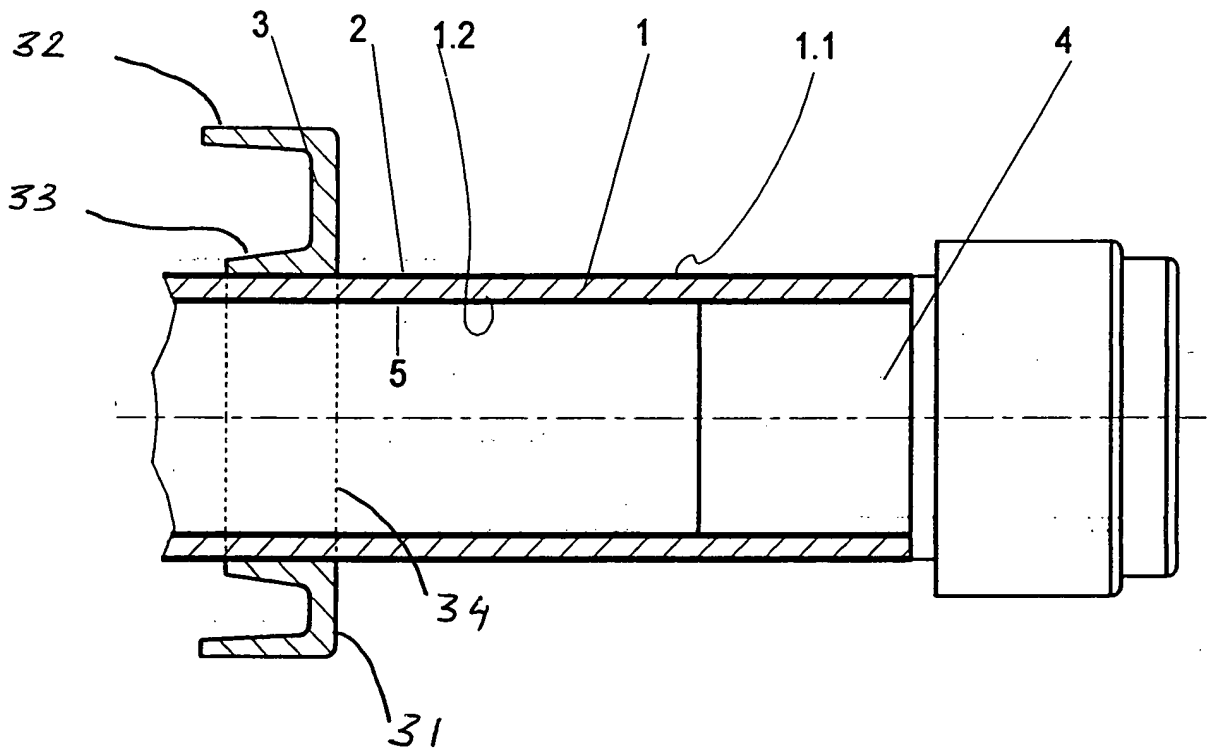


Fig. 4

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